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KD-Validated Anti-IQGAP1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1125

Specification

KD-Validated Anti-IQGAP1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P46940
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 189 kDa; observed, 195 kDa KDa**
Gene Name	**IQGAP1**
Aliases	**IQGAP1; IQ Motif Containing GTPase Activating Protein 1; P195; HUMORFA01; KIAA0051; SAR1; Ras GTPase-Activating-Like Protein IQGAP1; RasGAP-Like With IQ Motifs**
Immunogen	**A synthesized peptide derived from human IQGAP1**

KD-Validated Anti-IQGAP1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**8826**

Other Names
Ras GTPase-activating-like protein IQGAP1, p195, IQGAP1, KIAA0051

KD-Validated Anti-IQGAP1 Rabbit Monoclonal Antibody - Protein Information

Name IQGAP1

Synonyms KIAA0051

Function
Plays a crucial role in regulating the dynamics and assembly of the actin cytoskeleton. Recruited to the cell cortex by interaction with ILK which allows it to cooperate with its effector DIAPH1 to locally stabilize microtubules and allow stable insertion of caveolae into the plasma membrane (By similarity). Binds to activated CDC42 but does not stimulate its GTPase activity. Associates with calmodulin. May promote neurite outgrowth (PubMed:15695813). May play a possible role in cell cycle regulation by contributing to cell cycle progression after DNA replication arrest (PubMed:20883816).

Cellular Location
Cell membrane. Nucleus. Cytoplasm. Cytoplasm, cell cortex {ECO:0000250|UniProtKB:Q9JKF1}. Apical cell membrane. Basolateral cell membrane {ECO:0000250|UniProtKB:Q9JKF1}.

Note=Subcellular distribution is regulated by the cell cycle, nuclear levels increase at G1/S phase (PubMed:20883816).

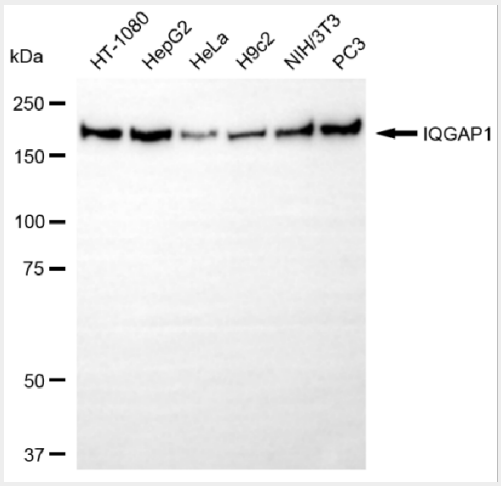
Tissue Location
Expressed in the placenta, lung, and kidney (PubMed:8051149). A lower level expression is seen in the heart, liver, skeletal muscle and pancreas (PubMed:8051149)

KD-Validated Anti-IQGAP1 Rabbit Monoclonal Antibody - Protocols

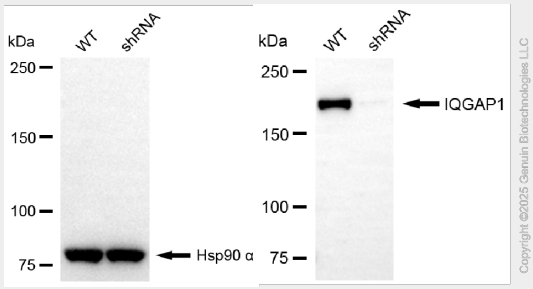
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-IQGAP1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-IQGAP1 antibody (Cat#AGI1125). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-IQGAP1 antibody (Cat#AGI1125, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody respectively.



Western blotting analysis using anti-IQGAP1 antibody (Cat#AGI1125). IQGAP1 expression in wild-type (WT) and IQGAP1 shRNA knockdown (KD) HepG2 cells with 20 µg of total cell lysates.

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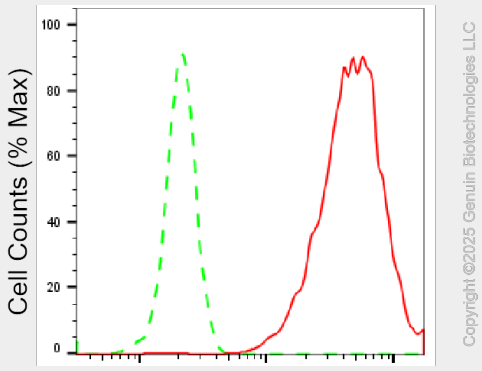
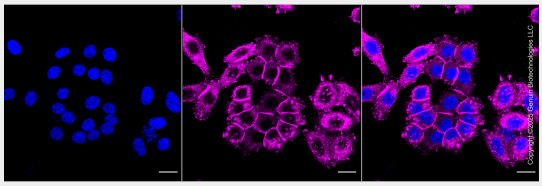
Hsp90 α serves as a loading control. The blot was incubated with anti-IQGAP1 antibody (Cat#AGI1125, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of IQGAP1 expression in HepG2 cells using IQGAP1 antibody (Cat#AGI1125, 1:2,000). Green, isotype control; red, IQGAP1.



Immunocytochemical staining of HepG2 cells with IQGAP1 antibody (Cat#AGI1125, 1:1,000). Nuclei were stained blue with DAPI; IQGAP1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20 µm.